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# THE WEEKLY BEE JOURNAL

ESTABLISHED  
IN 1861

DEVOTED TO THE INTERESTS OF HONEY PRODUCERS.

ESTABLISHED IN  
1861.

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THE AMERICAN  
**BEE JOURNAL**

PUBLISHED BY

**THOMAS C. NEWMAN,**  
EDITOR AND PROPRIETOR.

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#### TO CORRESPONDENTS.

**The Subscription Price** of the Weekly BEE JOURNAL is \$2.00 a year; and of the Monthly, 50 cents a year in advance. New Subscriptions can begin at any time.

**Club Rates for the Weekly** are: \$3.80 for two copies (to the same or different post-offices); \$5.50 for three copies; \$7.20 for four copies; and for five or more copies, \$1.75 each.

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**Lost Numbers.**—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will cheerfully replace them if notified before all the edition is exhausted.

**Sample Copies** of the BEE JOURNAL will be sent FREE upon application. Anyone intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

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Our rates for two or more copies of the book, "Bees and Honey," may be found on the Book List on the second page of this paper. Also wholesale rates on all books where they are purchased "to sell again." The time for reading up will soon be here, and in anticipation of this, we now have a very large stock of books on hand, and can fill orders for them in any quantity, on receipt of orders.

#### ADVERTISING RATES.

20 cents per line of space, each insertion.

*For either the Weekly or Monthly Editions.*

A line of this type will admit about 7 words. ONE INCH will contain TWELVE lines.

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#### TO CORRESPONDENTS.

**Advertisements** for the next Weekly BEE JOURNAL must reach this office by the Saturday of the previous week.

**Books for Bee-Keepers.**—For prices and descriptions of bee-books, see the second page of this paper.

**All Papers are Stopped** at the expiration of the time paid for, unless requested to be continued.

**When writing to this office** on Business, correspondents must not write anything for publication on the same sheet of paper, unless it can be torn apart without interfering with either part of the letter. The editorial and business departments are separate and distinct, and when the business is mixed up with items for publication it often causes confusion. They both may be sent in one envelope, but on separate pieces of paper.

**Always give the name** of the Post-Office to which your paper is addressed. Your name cannot be found on our List, unless this is done.

**Emerson Binders**, made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents each. They cannot be sent by mail to Canada.

**To Canadians.**—We take Canadian money for subscription or books; and Canadian postage stamps may be sent for fractions of a dollar.

#### FOREIGN POSTAGE, EXTRA:

To Europe—Weekly, 50 cents; Monthly, 10 cents.  
To Australia—Weekly, \$1; Monthly, 20 cents.  
George Neighbour & Sons, London, England, are our authorized agents for Europe.

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is attested by hundreds of the most practical and disinterested bee-keepers to be the cleanest, brightest, quickest accepted by bees, least apt to sag, most regular in color, evenness and neatness of any that is made. It is kept for sale by Messrs.

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JAMES HEDDON, Dowagiac, Mich.,  
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CHAS. HERTEL, Jr., Freeburg, Ill.,  
WM. BALLANTINE, Sago, O.,  
E. L. ARMSTRONG, Jerseyville, Ill.,  
ARTHUR TODD, Germantown, Philadelphia, Pa.,  
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Write for SAMPLES FREE and price list of supplies, accompanied with

150 COMPLIMENTARY.

and UNSOLICITED TESTIMONIALS from as many bee-keepers in 1883.

We guarantee every inch of our Foundation equal to sample in every respect.

CHAS. DADANT & SON,

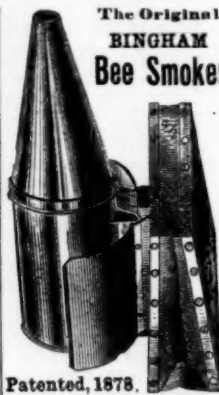
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UNCAPPING KNIFE.



PATENTED, MAY 20, 1878.



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Bee Smoker

Patented, 1878.

Prof. Cook, in his valuable Manual of the Apiary, states that "Mr. Bingham was the first to improve the old Quinby smoker by establishing a direct draft." Five years of persistent effort has demonstrated that no one but Bingham has been able to improve a Bingham smoker. Hundreds of Bingham smokers have been in use five years, and are yet in working order. They burn lots of blocks and chips and stuff, and make lots of smoke and comfort, and have no dampers or match-box attachments, as they never go out or fail to blow smoke up or down or sideways, much or little, swift or slow, just as you please, any or all the time; top up or down, they always do!

Bee-keepers will save money and vexation by buying genuine Bingham smokers and Bingham & Hetherington Uncapping-Knives first. We neither make nor handle any other supplies; but of these we are the original inventors, and only legal makers, and have had over 45,000 in use from one to five years, and receiving but one letter of complaint.

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Prices, by mail, post-paid.

Doctor smoker (wide shield) . . . 3/4 inch . . .	\$2.00
Conqueror smoker (wide shield) 3 . . .	1.75
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Extra smoker (wide shield) . . . 2 . . .	1.25
Plain smoker . . . 2 . . .	1.00
Little Wonder smoker . . . 1 3/4 . . .	.65
Bingham & Hetherington Honey Knife, 2 inch . . .	1.15

TO SELL AGAIN, apply for dozen or half-dozen rates. Address,

BINGHAM & HETHERINGTON,  
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Sent by mail, on receipt of price, by

THOMAS G. NEWMAN,

925 West Madison Street, CHICAGO, ILL.

On dozen or half-dozen lots of one kind, we allow 25 per cent. discount, and prepay postage. Special rates on larger quantities, given upon application.

**Bees and Honey, or Management of an Apiary for Pleasure and Profit,** by THOMAS G. NEWMAN.—It is "fully up with the times," in all the various improvements and inventions in this rapidly-developing pursuit, and presents the apiarist with everything that can aid in the successful management of the honey-bee, and at the same time produce the most honey in its best and most attractive condition. It embraces the following subjects: Ancient History of Bees and Honey—Locating an Apiary—Transferring—Feeding—Swarming—Dividing—Extracting—Queen Rearing—Introducing Queens—Italianizing—Bee Pasturage a Necessity—Quiet-ling and Handling Bees—The Management of Bees and Honey at Fairs—Marketing Honey, etc. 230 profusely-illustrated pages. Price, bound in cloth, \$1.00; 2 copies for \$1.80; 3 copies for \$2.55; 5 for \$4.00; 10 for \$7.50. Paper covers, 75 cents; 2 copies for \$1.40; 3 copies for \$2.00; 5 for \$3.00; 10 for \$5.00.

**The Apiary Register,** by THOMAS G. NEWMAN.—A Record and Account Book for the Apiary, devoting 2 pages to each colony, ruled and printed, and is so arranged that a mere glance will give its complete history. Strongly bound in full leather. Price, for 50 colonies, \$1.00; for 100 colonies, \$1.25; for 200 colonies, \$1.50.

**Honey as Food and Medicine,** by THOMAS G. NEWMAN.—It gives the various uses of Honey as Food; recipes for making Honey Cakes, Cookies, Puddings, Foam, Wines, etc. Also, Honey as Medicine, with many valuable recipes. It is intended for consumers, and should be liberally scattered to help in creating a demand for honey. Price, for either the English or German edition, 5 cents—one dozen, 40 cents—100 for \$2.50—500 for \$10.00—1,000 for \$15.00.—If 100 or more are ordered, we will print the bee-keeper's card (free of cost) on the cover.

**Bee-Keepers' Convention Hand Book,** by THOMAS G. NEWMAN.—It contains a simple Manual of Parliamentary Law and Rules of Order for the guidance of officers and members of Local Conventions—Model Constitution and By-Laws for a Local Society—Programme for a Convention, with Subjects for discussion—List of Premium for Fairs, etc. Bound in cloth, and suitable for the pocket. Price, 50 cents.

**Why Eat Honey?** by THOMAS G. NEWMAN.—This Leaflet is intended for distribution in the Bee-keeper's own locality, in order to create a Local Market. Price, 50 cents per 100; 500 copies for \$2.25; 1,000 copies for \$4.00. When 200 or more are ordered at one time, we will print the honey-producer's name and address FREE, at the bottom.

**Preparation of Honey for the Market,** including the production and care of both Comb and Extracted Honey, and Instructions on the Exhibition of Bees and Honey at Fairs, etc., by THOMAS G. NEWMAN. This is a chapter from "Bees and Honey." Price, 10c.

**Swarming, Dividing and Feeding Bees.**—Hints to Beginners, by THOMAS G. NEWMAN. A chapter from "Bees and Honey." Price 5c.

**Bee Pasturage a Necessity,** by THOMAS G. NEWMAN.—Progressive views on this important subject; suggesting what and how to plant.—A chapter from "Bees and Honey." 26 engravings. Price, 10c.

**Bees in Winter,** by THOMAS G. NEWMAN.—Describing Chaff-packing, Cellars and Bee-Houses. A chapter from "Bees and Honey." Price 5c.

**Bienen Kultur,** by THOMAS G. NEWMAN.—In the German language. Price, in paper covers, 40 cents, or \$3 per doz.

**Bee-Keepers' Guide, or Manual of the Apiary,** by PROF. A. J. COOK.—It is elegantly illustrated, and fully up with the times on every subject that interests the bee-keeper. It is not only instructive, but interesting and thoroughly practical. It comprises a full delineation of the anatomy and physiology of Bees. Price, \$1.25.

**Quinby's New Bee-Keeping,** by L. C. ROOT.—Its style is plain and forcible, making its readers realize the fact that the author is master of the subject. Price, \$1.50.

**A B C of Bee-Culture,** by A. I. ROOT.—Embraces everything pertaining to the care of the Honey-Bee, and is valuable to the more advanced bee-keeper, as well as the beginner. Cloth, \$1.25; paper, \$1.

**Blessed Bees,** by JOHN ALLEN.—A romance of bee-keeping, full of practical information and contagious enthusiasm. Price, 75c.

**The Hive and Honey-Bee,** by REV. L. L. LANGSTROTH.—This is the work of a master, and will always remain a standard. Price, \$2.00.

**Dzierzon's Rational Bee-Keeping.**—A translation of the master-piece of that most celebrated German authority. Price, bound in cloth, \$2.00; in paper covers, \$1.50.

**Queen-Rearing,** by HENRY ALLY.—A full and detailed account of 23 years' experience in rearing Queen Bees. The cheapest, easiest and best way of rearing. Price, \$1.

**Bee-Keepers' Text Book,** by A. J. KING.—A new edition, revised and enlarged. Price, \$1.00, bound in cloth.

**Extracted Honey; Harvesting, Handling and Marketing.**—By CHAS. DADANT & SON.—Details their management. Price, 15c.

**Practical Hints to Bee-Keepers,** by CHAS. F. MUTH.—Gives his views on the management of bees. Price, 10c.

**Dzierzon Theory.**—The fundamental principles of Dzierzon's system of apiculture as set forth by Berlepsch. It was translated by the late Samuel Wagner. Price, 15c.

**Dictionary of Practical Apiculture,** by PROF. JOHN PHIN.—This gives the correct meaning of nearly 500 apicultural terms. Price, bound in cloth, 50c.

**The Hive I Use,** by G. M. DOOLITTLE.—Details his management of bees. Price 5c.

**Foul Brood,** by A. R. KOHNKE.—Its origin and cure. Price, 25c.

**Moore's Universal Assistant, and Complete Mechanic.**—Contains over 1,000,000 industrial facts, calculations, processes, trade secrets, legal items, business forms, etc. Price, \$2.50.

**Kendall's Horse Book.**—No book can be more useful to horse owners. It has 35 engravings, illustrating positions of sick horses, and treats all diseases in a plain and comprehensive manner. It has many good recipes, etc. Price, 25c., in either English or German.

**Food Adulteration.**—What we eat and should not eat. This book should be in every family. Price, 50c.

**Scribner's Lumber and Log Book.**—Gives measurement of all kinds of lumber, logs and planks; wages, rent, etc. Price, 35c.

**Fisher's Grain Tables.**—For casting up the price of grain, produce and hay; wood measurer, ready reckoner, tables for plowing, etc. Price, 40c.

**Hand-Book of Health,** by Dr. Foote. Rules for eating, drinking, sleeping, bathing, working, dressing, etc. Price, 25c.

**Emerson Binders,** made especially for the BEE JOURNAL, and lettered in gold on the back. 75c. for the Weekly; or for the Monthly, 50c. They cannot be sent by mail to Canada.

**Constitution and By-Laws,** for local Associations, \$2 per 100. The name of the Association printed in the blanks 50c. extra.

**Ribbon Badges,** for bee-keepers, on which are printed a large bee in gold, 10c. each, or \$8 per 100.

**Poulterer's Guide,** for treating diseases of Poultry, etc., by C. J. WARD. Price 25c.



# Weekly Bee Journal,

DEVOTED TO THE INTERESTS OF THE PRODUCERS OF HONEY.

VOL. XX.

CHICAGO, ILL., DECEMBER 17, 1884.

No. 51.

## THE AMERICAN BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,  
EDITOR AND PROPRIETOR.

This being No. 51, one number more will close the Volume of the Weekly BEE JOURNAL for 1884. Nearly all of the subscriptions will run out in a few days and we would respectfully request such readers and patrons to sit down as soon as this article is read and send us the renewal of his or her subscription for 1885, and thus prevent the loss of a number and the consequent pleasure of the weekly feast it presents.

### The Elements of Success.

The *Prairie Farmer* well says that "if a person would reach the very highest success in horticulture, he must love trees and plants. Must love to look at them, to inquire into their wants and requirements, and to administer to their wants as living things. If a man loves a tree for its beauty, for its shade, for its fruit, and for its company, and loves to study varieties of fruits and habits of plants and trees, then he has the first rudimentary qualifications of a tree and fruit raiser, and may enter on work with assurance of success."

The same rule will apply to apiculture. A person who would succeed, should love the bees and their products; must love to look at them, ascertain their requirements, and administer to their wants. No others can expect to succeed. Though it is not essential that a person should enjoy the eating of honey, it is still desirable that such should be the case—for some human stomachs will not endure its sweetness. In such cases, however, a glass of sweet milk drank after eating the honey will usually cause a pleasant condition of

the system generally, and add to the health of the person using it.

If one loves the honey-bee for its docility and beauty, for its pleasant hum and sporting flight, for its industry and work, for its architectural skill and indomitable energy, then the first-principles of a bee-keeper presents themselves, and such may safely proceed, expecting ultimate success.

In this, as in all other departments of business, it is only the careful and practical that may hope to succeed. Nature has provided the health-giving delicious nectar in myriads of beautiful flowers, which deck forest, field and garden, and developed the bees to gather this abundant sweetness and store it in quantities far exceeding their wants—providing an opportunity for man to step in and second the efforts of Nature and the bees, and utilize the surplus honey for his pleasure and sustenance.

Bees and flowers are so closely allied, so dependent the one on the other, that we may well love both. What is there in all the Creation so soul-inspiring as a cultivated garden of Nature's flowers of variegated hues and heavenly grandeur? None but the unfortunate or despondent can fail to enjoy Nature in her garb of beauty, decked by the bounteous hand of Deity!

To produce a garden of living gorgeousness, we may all aspire and long enjoy its gratifying results. We may as well become enthusiasts upon bees and flowers, for apiculture and horticulture go hand-in-hand.

Before Vennor died, he had completed the manuscript of his almanac for 1885, which has just been issued. In his general forecast he says: "We are in a moist period, which will continue for two years, extending over the northern and middle States and Canada." The fall of 1884, he predicted, would be very open. He also predicted an unusually green Christmas and a mild New Year.

We have received 10 large quarto volumes of the "Tenth Census of the United States," and shall publish in the BEE JOURNAL for next week, the statistics therein given on honey and wax for all the States and Territories. The census gives no statistics on bees—or at least we have not been able, so far, to find any. We will give a thorough examination and report them, if any are found. The Secretary of the Interior has our thanks for forwarding these volumes, which our visitors can examine at their pleasure, if they so request. Their weight is about 75 pounds, and they were received by mail.

The next issue of the Weekly BEE JOURNAL is No. 52, and concludes the Volume for 1884. On account of the great labor on the Indexes, it will be *two days later than usual*. Our subscribers will please take due notice, and not expect it before that time.

Catalogues for 1885.—We have received the following:

Drake & Smith, Bristol, Vt.  
C. W. Costellow, Waterborough, Me.  
J. E. Pryor, Dexter, Iowa.  
C. M. Goodspeed, Thorn Hill, N. Y.  
T. A. Pool, Greensburg, Ind.

We have received a copy of the Greenwood, Neb., *Hawkeye* which contains the following notice of the "Greenwood Apiary" owned by Mr. M. L. Trester:

The apiary is situated in the west part of the town, and has an admirable location. The proprietor has 206 colonies of Italian and hybrid bees. He has erected a large and commodious extracting establishment, and has a yearly capacity of 20,000 pounds of extracted honey. The honey is of the finest and best, is strictly pure and free from adulterations. The proprietor keeps on hand at all times plenty of good, pure honey, which can be had at reasonable rates. The apiary has been visited by some of the leading bee-men of the State, and all say unhesitatingly that Greenwood takes the cake from them all.

### ALFILLARILLA, OR FILAREE, A California Honey-Plant.

Our California correspondent, W. A. Pryal, writes us as follows concerning this honey-plant:

The alfillarilla is an *Erodium*, and two species grow in California, viz: *E. circularium* and *E. muschatum*; they

Its growth is rapid, and by the first of December many of the plants may be found in bloom, and if the season continues favorable, they will be a foot or more in height by the middle of February. Damp and cold weather retard its growth and prevent its



belong to or are a form of "crane's-bill." The seed-pods, seed and parts thereof are quite odd, very much like those of the geranium. The early fall rains which usually commence early in October are just sufficient to start the sharp-pointed and spiral-tailed seed of the filaree, as it is commonly called, into existence. The genial sunny weather which follows these showers, and which weather is considered the finest California can boast of, causes the plant to spring up at once into vigorous life, as if by magic.

blooming for some weeks beyond its usual time. On cultivated soil it grows very rank; while on hill and pasture lands it rarely attains the height of four inches, and it is of a trailing habit, while that on fertile soil is tall and robust. From my observations I believe that the honey from *Erodium muschatum* has not that "rankish" taste as has *Erodium circularium*, but the former is more "musky." The engraving, Fig. 1, shows the general form of the plant; Fig. 2, part of the flower stalk, showing flowers, seed-pods, and the seed

ready to fall to the ground; and Fig. 3, a leaf.

**ITS HONEY QUALITIES.**—Honey obtained from these plants candies shortly after being taken from the combs. Its chief value is that its greatest flow of honey comes at a time when honey is much needed for stimulating the queen to greater exertions in laying. The flow of honey is enormous while it lasts, and the bees soon fill the lower part of the hive with it. Its time of blooming, to any consequence, is about Feb. 15, or a little later, and often so continues until the latter part of April. Like all California honey gathered during the winter months and early spring, it is of a pretty dark color.

**AS FOOD FOR STOCK.**—It is one of our "best weeds," for such it is, though not a noxious one, as it is easy to eradicate. Horses, cattle and swine are quite fond of it. Its fattening qualities appear to be excellent. Milk obtained from cows which have grazed on pastures where *Erodium muschatum* grows, has a musky flavor—so much so that many people are loth to drink it.

The plants withstand our severest winters, and possibly may be introduced into other States. It is our earliest honey source, and all honey gathered from it is consumed by the bees in brood-rearing, so whatever bad qualities it has are not detrimental to the apiarist.

Besides the names which I have mentioned, it has other common names among our people, the principal one being "pin-weed;" and by referring to the engraving, one can perceive why it is so called. It grows everywhere, in the highway, the garden, back door-yard, in the valley and on the hill-top, on high, dry and low ground.

☞ The regular annual meeting of the Indiana State Bee-Keepers' Association will be held on Thursday and Friday, Jan. 22 and 23, 1885. The meetings will be conducted in the rooms of the State Board of Agriculture, on the corner of Tennessee and Market Streets, in Indianapolis, Ind. It is proposed to make this the most important and interesting meeting of bee-keepers ever held in the State. An extensive programme, including all questions of importance to bee-keepers, is being prepared and will be soon sent out to bee-keepers throughout the State. Prominent apiarists from neighboring States have been invited to assist and presumably many of them will be in attendance during the meeting. These gatherings are of vast importance, especially to beginners, and all those at all interested in this important industry should make it a point to attend this meeting.

FRANK L. DOUGHERTY, Sec.

☞ The Central Illinois Bee-Keepers' Association will hold its next annual meeting in Bloomington, Ill., on the second Wednesday in January, 1885, at 9 a. m.

W. B. LAWRENCE, Sec.



### Bee-Keeping in India.

Bee-keeping in India, which appears to be one of the lost arts, has now found a champion in Mr. John Douglas, of the Indian Telegraph Department, says the *London Post*. Apiculture may yet become a happy resource to the indigent population of India, both as adding another article to their dietary and as eking out their scanty means. In some districts wild honey is said to be eagerly sought after by the native population as an article of food, an offering to the gods, and a soothing syrup for fractious infancy.

The first question for Indian apiculturists is the domestication of the great tiger honey-fly. The choicest honey is produced by this ferocious insect with a villainous sting, named in different parts of the country Bhonwara, Bhanwar, Bhaur, and great tiger honey-fly; but the most worthless sort is obtained from an amiable little insect about a quarter of the size of a common house-fly, which offers no objection to being observed, possibly aware that the intruder will obtain very inadequate compensation for his trouble. This species usually builds low down near the ground, under stones or in the clefts of trees; its nest is sought after by children, who eat up honey, comb, and grub on the spot, the bee meantime accepting the situation with true Asiatic philosophy.

Far different is the fate of him who ventures to disturb the Bhonwara bee, which attacks the traveler on the slightest provocation, and very often strikes on the principle that prevention is better than cure. A swarm of these bees have been known to put a regiment of cavalry to flight, and innumerable are the instances in which man and beast have fallen victims to their unrelenting animosity. They build their nests on ledges of rock in steep and inaccessible places, and to obtain their honey, which is said to rival in flavor the celebrated honey of Mount Hymettus, the native hunter has to exercise much caution and dexterity.

The hunter of these bees waits for a dark night, and starts forth after 9 p. m. Having selected the spot he intends to rifle, he prepares to reach it either from above or below, according as seems most feasible; should he ascend he does so by means of a ladder; should he decide to descend, a number of thin, green bamboos are spliced together with fibre and let down over the face of the precipice. One end is fastened to a tree or stake driven into the ground, and over this the brother-in-law of the descending man keeps watch. This particular relative is chosen as being the least likely to favor foul play, since on him, in case of accident, would devolve the care of the widow and children. The man takes down with him a basket, a knife, and a bunch of dried grass, to which he sets fire on arriving opposite the nests. The bees, aroused by the

glare, desert the combs in thousands, but they are too stupefied by the smoke to do anything but buzz aimlessly about, alighting on the rocks and branches, and even on the person of the hunter himself, without attempting to sting. The comb is cut away and dropped into the basket, which, when full, is pulled up by those above. Some of the hunters who draw honey in the daytime rub themselves with the juice of a plant the aroma of which bees cannot endure; for these insects have very sensitive organs of smell, and it would appear that the capricious likes and dislikes they show for different persons depend on their olfactory nerves. It is well known that some people can handle bees with impunity, while others dare not venture within 50 yards of them. The acuteness of this one organ is, however, counterbalanced by their total deafness.

Since Virgil wrote the Fourth Georgic, his recommendation has been followed not to have the hives too near the dwelling house, lest the presence of man should disturb the bees' peace of mind; but the Kashmir peasant builds his hives actually in his house, and with the best possible results. Round, tubular cavities are left in the walls, extending right through from the inside to the outer air. They are lined with mortar worked up with the down of thistles. The ends of the tubes are closed with platters of red earthenware, the outer platter having a circular hole in its centre to enable the bees to pass in and out. When the time for taking the honey arrives, the house-father removes the inner platter, and lighting a wisp of straw blows the smoke into the hive; this causes the bees to rush precipitately towards the outlet, and enables the man to cut away the comb with a knife. Enough is left hanging round the further end of the hive to encourage the swarm to return and begin their labors again.

In "Moorcraft's Travels" we find his observations on bee-culture in the Himalayas as follows:

"In most villages of the northern range of the Himalayas, bees are kept, and honey, the produce of the wild or domesticated bee, is an article of sale. It is commonly sold in the bazaar at from four to six seers for a rupee, and, although, not much thicker than syrup, is of a flavor equal to Narbonne and less cloying to the stomach. There is no great demand for wax, otherwise this might also be plentifully supplied. At present the comb, after the honey is compressed, is thrown away. The domestic bee is known by the name of mahru, mohri, and mari. It is not much above half the size of that of Europe, but it is very industrious and mild tempered. The wild bee is termed bhaonra, a name by which the people of the plains designate the humble-bee, but is not half the bulk of that insect, though larger than the domestic bee of Europe. It is of a darker color generally, and has longer and broader wings. Its temper is irascible, and sting, venomous. It commonly builds

its nest under projecting ledges of rock, overhanging, steep, mural precipices, in a situation almost inaccessible to bears and men. The hive contains a large quantity of both wax and honey. The latter, if gathered before the month of Bhadra, is fully equal to that of the domestic bee, but in that and the following months is said to produce intoxication followed by stupefaction. The effect is with some probability ascribed to the bees working on the flower of a species of aconite, which is in bloom in Bhadra and Asharh, and which, growing high up the mountain, is beyond the flight of the domestic bee."

That the virtues of the honey depend on the particular pasturage the bee has found, is well known, and every school boy has read in Xenophon of the deleterious effects the honey of Trebizond had on the soldiers during the retreat of the Ten Thousand. Narbonne honey owes its peculiar excellence to the rosemary plant, and the best honey years in India are when the strobilanthes is in bloom. There are many species in this genus, and they flower once in seven or ten years, about the month of May. Immediately the flowers wither and fall off, the plant itself dies, a new crop afterwards springing up from the seed. This flower has a strong and sweet scent, and whenever it is in bloom colonies of bees migrate from all parts of the country to feast on the honey and to rear their young. At such times honey becomes plentiful and cheap, and is of the finest flavor.

The sixteenth annual convention of the Northeastern Bee-Keepers' Association will be held in the City Hall at Syracuse, N. Y., on the 21, 22 and 23 of January, 1885. The executive committee are determined to maintain the high standing and enviable reputation which the Association has justly gained in the past, and at the coming convention they propose to outdo all former efforts. The meeting will surely be the largest and most interesting ever held in America. No bee-keeper can afford to stay at home. All are invited. All implements of the apiary sent to the Secretary, will be properly arrayed to compare favorably with others on exhibition, and will be disposed of or returned, as the owner directs. Reduced rates for board at hotels.

GEO. W. HOUSE, Sec.

L. C. ROOT, Pres.

To Canadian subscribers let us say that we have made arrangements so that we can supply the *Farmer's Advocate* of London, Ont., and the *Monthly BEE JOURNAL* for one year at \$1.25 for the two.

## CORRESPONDENCE

For the American Bee Journal.

### Hibernation.—In Rhyme.

WM. F. CLARKE.

Rest,—busy little workers all,—  
Through winter's dreary hours;  
Into a peaceful torpor fall,  
And hoard your latent powers.

Your domicile is not a sieve  
With air-drafts coursing through—  
In such a house I could not live,  
Neither, my pets, can you.

You are not buried in a pit.  
A cellar, or a clamp;  
Never by ray of sunshine lit,—  
Cheerless, and foul, and damp.

Your dwelling is a chaff-packed room  
Raised above toads and mice,  
Meant for a home, and not a tomb,  
Propolized tight and nice.

A column of heaven's purest air  
Beneath your cozy nest,  
Your native instincts will prepare  
To suit your moods of rest.

When'er Jack Frost relents his grip,  
And there's a thawing day,  
Rouse up! a little honey sip,  
And have a spell of play.

Dance on th' alighting-board a jig,  
Or pirouette on high;  
No need to wallow, like a pig,  
When you can have a fly!

Don't eat a bit of pollen, dears,  
While you are on the frolic,  
For, if you do, James Heddon fears  
You'll die of bilious colic!

Your play-spell over, tightly hug  
And cluster close together,  
Then each can sleep, "snug as a bug,"  
All through the coldest weather.

Soon blust'ring March will shake you up,  
And whisper loud of spring:  
Your master, then, a little cup  
Of sweet, will to you bring.

The queen, her sleepy head will scratch,  
And take the hint to lay,  
Then you must seek the willow-patch  
Upon the first fine day.

With catkin pollen feed the brood  
And nurse them up to strength,  
Till nectar from the maple-wood,  
Rewards your search at length.

Then, as the hive grows populous  
With vigorous young bees,  
Each of you, without "muss or fuss,"  
Depart this life in peace.

Your course complete—your work well  
done—  
Die without pain or fear:  
And thus your history will run,  
"ESCAPED THE DIARRHŒA!"

Speedside, Ont.

The Union Bee-Keepers' Association of Western Iowa will meet in Stuart, Iowa, at 10 a. m. on Saturday, Dec. 27, 1884. All who are interested are invited to attend.

M. E. DARBY, Sec.

The Willamette Valley Bee-Keepers' Association will hold its second meeting at La Fayette, Oregon, on the third Tuesday in June, 1885. All who are interested are invited to attend.

E. J. HADLEY, Sec.  
F. S. HARDING, Pres.

For the American Bee Journal.

### Few Uncapped Sections in the Fall.

G. M. DOOLITTLE, 40—80.

How to manage our bees so as to secure the greatest yield of comb honey, is a question of great importance to all those who are engaged in producing such honey for market, hence we often have articles on this topic giving us instruction regarding it. But comb honey is of little value unless thoroughly sealed or capped over; and from the reports which I get telling of much unsealed honey, it would seem that, "How to manage our bees so as to have few uncapped sections in the fall," is a question of nearly as much importance as the first; yet it is one about which very little is said in print.

For years I was troubled by having from  $\frac{1}{4}$  to  $\frac{1}{2}$  of the combs in the sections not fully sealed at the close of the honey harvest, which were only salable at a reduced price; but of late I have very few of such even in a poor season. After experimenting for a year or two regarding the matter, I became convinced that the cause of the trouble was in giving the bees too many sections, and especially conducive to this was the plan of tiering-up sections late in the season. How often have I, years ago, spoiled a promise of an abundant yield of comb honey by tiering-up four or five days before the honey harvest closed!

To tier-up sections profitably requires considerable tact, and especially do we want a thorough knowledge of the honey resources of the field which we occupy. I think that there is too much injudicious talk in some of our bee-papers regarding our not allowing the bees under any circumstances to cluster on the outside of the hive, the idea being generally conveyed that when bees thus cluster out they need more room.

Now, it depends upon when this clustering out occurs, whether more room is needed or not; and hence I said "injudicious talk." If the clustering out occurs at the commencement, or in the height of the honey harvest, then more room should be given; while if at the latter part of the honey harvest, or in a time of honey dearth, no more room is needed; for more room at this time results in one case in many unfinished sections, and in the other to an absolute waste of time used in enlarging the hive. To illustrate: During the past season we had a day and a half of good honey secretion, a little past the middle of the basswood bloom. As, at this time, I had on each hive, section room of only about 20 pounds capacity, the bees began to be crowded out; and hoping that the weather might yet be favorable for a week or more, I spread the sections on a few hives by placing some empty ones between those nearly full, giving at most only about 35 pounds capacity, while when all is favorable, I use 60 pounds capacity. The result was that the bees immediately took possession of the empty sections, while

the weather turned unfavorable again, and when the season was over, I got no more than 5 to 10 pounds of capped honey from these hives, while those not touched gave 20 pounds of nice, capped honey. In this case the bad weather was the cause, for the spreading was seasonable, but in former years I had been the cause by spreading or tiering-up but a few days before the honey harvest closed.

Again, after the basswood bloom had failed, there came on a very hot spell when not a bit of honey was to be obtained, and the result was that the fronts of my hives were black with bees. According to the advice above alluded to, I should have given more room, and if the bees then persisted in clustering out, I must take my smoker and smoke each colony until they all went in and staid there. Nonsense! At such times the bees are doing just as much for the benefit of the apiarist, hanging on the outside of the hive, as anywhere.

But to return. My plan of operation to secure all capped sections is as follows: When the bees show, by building little bits of comb here and there about the hive, that they are ready for the sections, I put on sections to the amount of about 20 pounds, and leave them thus until the bees are well at work in them, when they are spread apart and about 10 pounds more of room given them. When this room is fully occupied, I give room at the sides of the hive of about 15 pounds capacity; and were I using the tiering-up plan I should have my surplus arrangement so arranged that at this time I could raise up about one-half of the sections already on, putting empty sections under them instead of raising up the whole 30 pounds, thus giving them more room, a little at a time, as the bees have need.

By the time the bees fully occupy the 15 pounds of room given at the sides, the first 20 pounds given them is ready to come off; and when this is taken off, the partly filled sections at the sides are raised by cases and put in the places of those which have been taken off, while empty sections are given at the sides, for from 15 to 30 pounds according to the size of the colony. Thus I keep taking off and putting on sections, taking the full from the top and putting the empty sections at the sides, until the season begins to draw toward its close, when as fast as those partially filled sections are taken from the sides to replace the full ones taken from the top, the side-spaces are closed up till all are on top. Then as fast as the sections are finished there, the top-space is contracted till only the original 20-pound space remains. In this way the bees are given all the space they really need, while the chance for many uncapped sections in the fall is quite small.

By a little study the tiering-up plan can be made to conform to the above, and worked on the same principle. I think that any plan which requires the tiering-up of from 30 to 40 pounds capacity, or the spreading out of the same number of pounds at one time,



is a wrong policy to adopt; while the giving of a small amount of surplus room as needed, seems to me to be a wise course to pursue. I now use a section  $5\frac{1}{2} \times 3\frac{1}{2} \times 2$  inches, outside measure, and find that while it works to the best advantage in my hives, it also sells for fully as good a price in all of our Eastern markets as does the  $4\frac{1}{4} \times 4\frac{1}{4}$  or one-pound section of honey.

Borodino, © N. Y.

For the American Bee Journal

### Home-Made Honey-Extractor.

E. A. THOMAS.

While visiting a friend of mine in Massachusetts, I had the opportunity of seeing and testing his new honey-extractor, which, for rapidity and ease of manipulation I have never seen equaled. My friend is an excellent machinist, and made this extractor himself. While recognizing the fact that the cost of the machine will prevent its coming into general use, I am inclined to believe that it would be desirable for those who run their apiaries for extracted honey, and have considerable extracting to do. The following is a description of it, as near as I can give it:

The can, which is made of block-tin all in one piece, is 3 feet and 4 inches high and 23 inches in diameter; there is a space of 12 inches under the comb-basket, giving a storing capacity of about 200 pounds. The comb-basket is 18 inches deep and  $14\frac{1}{2}$  inches square, and is attached to a shaft running in a standard in the centre of the can. The bearing is so arranged that no honey can get to it, and can, therefore, be kept well oiled. A reversible basket can be used if the operator so desires. Now I am coming to the part wherein it differs from all other extractors which I have ever seen. On the lower end of the shaft to which the basket is attached, is a beveled gear running in a corresponding one on a horizontal shaft extending from the centre under the can, to the circumference. Here, again, is another set of beveled gears, carrying the motion to an upright shaft running in boxes outside of the can. The upper end of this is geared to a 6-inch gear attached to the side of the can which has a handle for turning. The small gears are  $1\frac{1}{2}$  inches in diameter, and the shafts are  $\frac{5}{8}$  of an inch.

From the above description the reader will perceive that there is nothing on the top of the can over the comb-basket to interfere with the putting in and taking out of combs, or the removal of the basket for cleaning; also that the turning-wheel is upright, which gives a much easier and more natural movement than the round and round motion of a horizontal wheel. Perhaps the reader may think this is of but little consequence, but let him turn the extractor all day, as some have to do, and I think he will change his mind.

Notwithstanding the fact that the extractor is geared up so much, it is easier to run than any I ever saw.

This is due in part to the well-fitting bearings and the accuracy of construction. The whole machine is well and solidly built, and there is no shake whatever to the comb-basket. Only a slow motion of the turning-wheel is required to throw out the honey, and the comb-basket can be revolved very rapidly, if necessary, with an extra exertion on the part of the operator.

Another good thing about it is the rapidity with which it can be taken apart and put together. The comb-basket can be taken to pieces, every thing taken out, and all put together again in less than a minute.

Rural New Yorker.

### The Hunting of Bee-Trees.

PROF. A. J. COOK.

I am requested to give directions for finding the haunts of bees in the forests. I gladly do this, though unless one wishes to hunt bees for the pleasure, only, it is a non-paying business. The time spent in finding the bees, the usual condition of the colony with crooked combs, and little honey, and the trouble to secure the bees, honey, and combs in such a state that they will be of value, together with the fact that the owner of the tree does not like to have his trees disturbed, even though he may give his consent, make this business as a business anything but desirable.

To understand bee-hunting, we have only to remember that bees like sweets, and are sure to find and to sip them; and that the bees, as soon as full, will circle about, as if to mark the locality, and then dart off straight toward the tree or hive where they are to store the nectar.

In late fall after bees have ceased to gather honey, we may soon attract them by burning an old piece of honey-comb; at other times they may be taken from the flowers. To "line" bees one should have a small box without a bottom, and with a movable glass top. This box should be six inches each way, and on one side there should be a shelf within, three or four inches wide on which a piece of comb may be laid. With this box and a bottle of water sweetened with honey, or sugar, one is prepared for operations. When a bee is discovered in the woods on a flower, the box is placed over it, and as soon as the bee commences to sip the sweet liquid which was turned into the empty cells of a comb previously fastened to the shelf in the box, the cover should be removed. The bee will soon fly, and must be watched carefully. After a few circles, each circle bending toward its home, the bee will dart off in that direction. Soon it will return with others, and as soon as the line is made certain, the hunter can go a few rods to one side and find another line, and of course where these lines meet will be the tree. If in the region of a bee keeper, one must be careful or the lines will take him to some one's hives, and his time will be lost. If no bees are found on

the flowers, then the bees can be attracted to the sweets in the box by burning the comb as suggested above.

When once found, it is better to climb up and cut the bees out rather than to fell the tree, if this is possible. A little smoke and the jarring will so frighten the bees that the danger from stings is very slight. It takes some experience to line bees quickly; but old bee-hunters will find bee-trees in a surprisingly short time. Agricultural College, ♀ Mich.

For the American Bee Journal

### Queen-Excluding Honey-Boards.

W. Z. HUTCHINSON, 68-94.

Of late, quite a number of inquiries have come to me asking for information in regard to the Heddon skeleton or slat honey-board; and from the tone of many of them, it is evident that the writers regard this honey-board as queen-excluding. Such is not the case; Mr. Heddon has never claimed that they are. He says that they *discourage*, but do not *prevent* the queen from entering the surplus department; and so far as my experience goes, Mr. Heddon is correct.

Whether a queen-excluding honey-board is needed, depends upon the size and shape of the brood-nest, and the method of management. With a large brood apartment, and especially one which approaches a cube in shape, there is less inducement to the queen to invade the surplus department than with a flattened or small brood-nest. The advantages of a small, flat brood-nest are, that it is kept so full of brood that there is little room in it for honey, and the surplus department is brought so near the centre of the brood-nest that nearly all the honey is stored in the surplus department and sold for at least twice as much per pound as sugar will cost to feed the bees for winter. Sugar is a safer food for winter than honey; and it is *hoped* that these small brood-nests will be free from pollen upon the approach of winter.

With an ordinary eight-frame, Langstroth hived filled with combs, the queen has so seldom left the brood-nest when working for comb honey, that I should not care for a queen-excluding honey-board were it not for the swarms. Let a swarm be hived upon empty combs, and the queen will not go into the sections; but let it be hived upon empty frames, and let there be foundation or comb in the sections, and the queen will make a brood-nest of the surplus department; she will also do so if the brood-frames are filled with foundation, and the sections with comb. In working for extracted honey, the queen is *quite* likely to take up her field of labor in the surplus department.

I am strongly in favor of having the brood occupy one part of the hive, and the honey another, to a greater extent than has yet been generally accomplished; and to secure this result, I know of no better plan than to use a queen-excluding honey-board:

The objections to the perforated zinc for a queen-excluding honey-board are, first, its cost; second, its lack of rigidity. When first put on it does very well; but, of course, the bees stick it down and connect it by means of brace-combs, with the frames below, and when it is removed it is liable to be bent or kinked so that when again placed upon the hive the bee-spaces above and below the zinc are not perfect. Where the space becomes too small, the bees stick the zinc fast with propolis; where the space is too small, they build brace-combs.

To make the Heddon honey-board queen-excluding, I have placed the slats five-thirty-seconds of an inch apart, and such boards are a success; but the difficulty is in adjusting the spaces to a nicety, and keeping the slats in place. To overcome this difficulty, I have, during the past season, used honey-boards of perforated wood. Their construction is as follows: Take lumber  $\frac{1}{2}$ -inch thick, cut it into lengths as long as the hive, and of such width that three pieces will cover the top of the hive. With a saw of such thickness that it will cut a kerf five-thirty-seconds of an inch in width, cut slots into these pieces of wood, something after the manner of the perforated zinc. I make the slots about 3 inches in length, one inch apart, and they "break joints" as do the perforation in the zinc. A frame of  $\frac{5}{8}$ -inch stuff as large as the top of the hive, has the inner corners of the end-pieces rabbeted on one side, and into these rabbets are placed the perforated pieces, where they are fastened with brads. This gives a honey-board with a raised rim of about  $\frac{3}{8}$  of an inch around its edge, which allows a bee-space below the sections. Such a honey-board always preserves the bee-spaces perfectly, and, as yet, no queen has passed through them.

The perforation in a zinc honey-board need to be a trifle smaller, to restrain the queen, than in one  $\frac{1}{4}$  of an inch thick.

After using queen-excluding honey-boards for two years, I am unable to see that they lessen, or in any manner affect the amount of surplus honey secured.

Rogersville, 6 Mich.

For the American Bee Journal.

### That New Zealand Comb Foundation

G. ELLIOTT.

In the BEE JOURNAL for Sept. 3, 1884, there is a letter from "Another New Zealand Bee Keeper," and an article copied from the *New Zealand and Australian Bee Journal* about our New Zealand comb foundation made by Mr. Hopkins; and as "Another New Zealand bee-keeper" wishes to inform the readers of the BEE JOURNAL that Dr. Dalziel had no grounds for getting the foundation analyzed, allow me to give my account of it, as it was chiefly through me that the Doctor acted as he did.

Dr. Dalziel showed me some samples of comb foundation which he had received from Chicago, and these looked so very different compared with the foundation which we were getting from Mr. Hopkins. The color was the same as that of the beeswax which I had always obtained from my own bees; the foundation of the cell-walls was deep, thick and soft; the sheet was more pliable without breaking; and, in fact, it was in every way such a superior article that it looked as if, with its use, there would be none of the trouble which I, and all the bee-keepers to whom I had spoken on the subject, had had with Mr. Hopkin's foundation, which was so brittle, and sagged so much after being put into the hive, that I considered the best thing that I could do would be either to get my foundation from America or possess a machine and make my own.

With this view, I inquired from a traveler of Messrs. Porter & Co., importing ironmongers, whether they had any American bee-appliances. He said that they had on hand a honey-extractor, a machine for making comb foundation, and wax to be used with the machine, and he believed that there were some other implements among them. I said that a foundation machine was what I wanted, chiefly, but I would use my own beeswax. He said that the wax which they had was much cheaper, as it was a composition largely used in America, but it was not pure beeswax. As he did not have these articles on his list, he did not know the prices, so I asked him to inquire and then let me know.

A short time afterwards I saw him again, and he told me the price of the extractor and foundation machine, but said that they had no more wax, as it had all been sold and gone to the Thames. I asked him who had bought it, and he said, "I think that it was Mr. Hopkins." He said that it had been a sample lot sent over with the machines.

A few days after the above interview, as Dr. Dalziel was going into Auckland, I asked him to call at Porter's and look at the extractor and foundation machines for me, to make what inquiry he could about the composition wax, its price, etc., as the traveler's statement might, perhaps, account for the difference in the two specimens of foundation. I believe when the Doctor made the inquiry about the wax, the employes at first said that they had never had any wax; but when he informed them of what the traveler had told me, they said that they remembered that such a parcel did once pass through their hands, but they could not remember anything very definite about it. One of them promised to examine the books and ascertain all he could about it, but if it was a sample lot, it was very likely that there would not be any entry of it.

I afterwards saw the letter which the Doctor received, stating that no record of the parcel could be found; and we thought that, considering the possible truth of the traveler's state-

ment, and the evident difference in the two lots of foundation, that there were good grounds for suspecting the purity of Mr. Hopkin's comb foundation. We agreed to have it analyzed by Mr. Pond, of Auckland, and forward the report to the *New Zealand Bee Journal* whatever the report might be.

Auckland, N. Zealand, Nov. 8, 1884.

[The foregoing explanation is given in the BEE JOURNAL as requested, because it has twice decided (see pages 155 and 571) that the sample of beeswax sent here from New Zealand was a "pure article."

The trouble, no doubt, came from the blundering of the traveling salesman of the importers, who called the foundation mill "a machine for making artificial comb." Either he did not know what he was talking about, or the importers had obtained some "paraffine;" and in saying that "spurious wax" or "paraffine" was "a composition largely used in America" in the manufacture of comb foundation, he was very far from the truth. We are informed that an Ohio manufacturer has been using some as an experiment, and that is about all that can be said about it. Now let the matter rest.—ED.]

For the American Bee Journal.

### Whom Can We Believe?

JOSHUA BULL.

I believe that I have carefully read every article that has appeared in the BEE JOURNAL for over a year, especially every thing bearing upon the vexed question of wintering bees; and I find so much diversity of opinions, and apparently conflicting theories advocated by those who claim to be experts in bee-keeping, that it is enough to confuse and bewilder those who have had no experience in the business. How are we to decide whether it is best to give our bees honey or sugar for winter food, upward or downward ventilation, to place them in the cellar, in a repository, or to leave them on the summer stands? One says, "Remove the bottom-board and place the hive upon a tray of dry sawdust;" while another recommends a perpendicular column of air underneath the hive. Now, with all this diversity of teaching, with so many different theories urged upon us, how are we to know whom to believe? Why, it seems to me that this wintering problem is about as far from being settled as the question of an "open sea around the North Pole!"

Are bees deficient in instinct? I was quite surprised when reading Mr. Heddon's statement, on page 501, where he said, "I have found that the judgment of man knew better than their own instincts what was best for



bees." Again, on page 550, he says that "Dame Nature either forgot to endow them with it, or did not care for their failure, or herself made a failure; for they do not at all times succeed any better than the tender plant against the drouth, the beautiful shrub against the frost of winter, the sparrow against the hawk, the minnow against the shark, etc." Now, with all due respect for Mr. H., I wish to be allowed to express my objection to his assertions, for therein appears to be a grave charge against the Creator, in that Mr. H. accuses Him of indifference about his works, or of failure to accomplish what He intended.

Let us examine this matter a little before we accept it. Mr. H. may be fully convinced in his own mind that he knows better than the bees what they need; but has he demonstrated it sufficiently clear to convince others that such is really a fact? We, of course, leave every one to be his own judge about that; but in regard to the reasons which he offers in support of his assertion, that bees are deficient in instinct, I wish to say: 1. I am not aware that plants and shrubs have any instinct at all, or any powers of volition whatever, and, therefore, can see no similitude in the comparison; and so far as the sparrow, minnows, etc., are concerned, when they are pursued, overtaken and devoured by predatory animals stronger than themselves, it is no indication that they are deficient in instinctive knowledge for self-preservation, but only that they are compelled to succumb to powers greater than their own; simply the weaker is overcome by the stronger. I believe, and, no doubt, Mr. H. will concur with me in this, that if the sparrow, minnow, and all others of the weaker creatures of creation could only receive such assistance as would enable them to carry out their instinctive impulses for self-preservation, that they would never allow themselves to fall a prey to the destroyer; and, no doubt, this principle will hold good with bees as well as with anything else. Therefore, it is clear to my mind that in order to secure the best results, we should not try to controvert or in any way interrupt the plans which the bees devise for their own preservation; but when we can render them such assistance as will enable them to consummate those plans, then, and not till then, do I believe that this wintering difficulty will be successfully overcome. I am slow to believe that instinct ever leads astray or guides in the wrong direction.

"And reason raise o'er instinct as you can,  
In this 'tis God directs, in that 'tis man."

**THE TREE-TRUNK PRINCIPLE.**—It is not in my nature to accept any theory or believe any statement simply because some certain person has said it is so, unless that person can produce some evidence or argument which will appeal to my understanding or in some way accord with my own experience; but I am quite inclined to think that Messrs. Wm. F. Clarke and A. H. Dutton are leading off in the right direction on this win-

tering question; and as a reason for this belief, allow me to give a little item of my own experience.

Some 35 or 40 years ago, when I was a mere lad, my father set me to work to make a bee-hive on the following plan: A box-hive 26 inches high by 16x12 inches, and in the lower part of this box-hive were fixed three honey drawers on each side, 6x6x12 inches, thus leaving an open space between them of about 4x12 inches, and 18 inches high. Over these drawers was placed a floor or bottom-board with a slot or passage-way 1x12 inches in the centre, and above this was the brood-chamber, 16x12x8 inches, then a top board or cover was put on and nailed down tight, and a door upon the back side to exclude light from the drawers and to make all snug, completed the hive. (I write this from memory, and the dimensions may not be exactly correct, but I think that they are nearly so; the principle is the same anyhow.)

A swarm of bees was put into this hive, and the whole thing was put upon a bench about 14 inches high, with blocks placed under each corner of the hive to raise it about  $\frac{3}{4}$  of an inch, and there it stood just in that position during summer and winter. The bees filled it with comb clear down to the bottom of the hive; but in winter they would all cluster in this upper chamber, thus leaving an air-space below them, 12x4 and 18 inches high, except what space the comb occupied. In this condition they lived 15 years in succession without once being winter-killed.

When Mr. Clarke announced his new theory, it at once recalled to my mind the above-mentioned facts, and I felt quite inclined to believe that his idea might be correct, and, if it does not entirely solve the difficulty, it may prove to be a very important principle, and, therefore, a step in the right direction.

Seymour, Ct. Wis., Dec. 6, 1884.

For the American Bee Journal.

### First Queen by Mail from Jerusalem.

ANDREW H. DIVEN.

I would say to the bee-keepers generally, that on June 23, 1884, I received a Palestine queen from Philip T. Baldensperger, of Jerusalem, Palestine, direct by mail, the cage being post-marked at Jerusalem on May 28, 1884.

The queen came through in good condition, no evidence of having suffered from confinement. About one-half of her attendant bees were dead. She began laying in less than a week after her arrival, and is now in winter quarters with a full colony of Palestines. Mr. B. and myself think that this is the first queen sent direct by mail from Palestine to the United States. If we are correct, we modestly ask that it be so placed on record; if we are in error, we invite correction.

Mr. Baldensperger wrote me as follows on Aug. 6, 1884, dated Jerusalem: "I am very glad to know that

the first queen mailed from Palestine to the United States arrived safely, and that she began to lay, too. It is a great satisfaction to know that the confinement of 26 days did not injure her. In the *British Bee Journal* of Sept. 1, 1884, is a notice of an American queen which crossed the Atlantic, and the correspondent says, "Probably this is the first queen which crossed the Atlantic." I think that he refers to the "golden queens" as being the first; for Messrs. Benton, D. A. Jones and others occasionally mailed queens from Syria and Cyprus to England first, and after some rest they were sent on to America; but the queen which I sent you went through from Bethlehem via Jerusalem to the United States in 26 days."

The cage in which the queen came, I send to be placed in the Museum.  
Seneca, N. Y., Dec. 9, 1884.

[The cage is placed in the Museum, as requested.—Ed.]

Home Farm.

### To Beginners—Manipulation.

J. E. POND, JR.

I have been asked why some one of experience does not write a chapter upon manipulation. I presume the reason is that no one has thought that there was any necessity for so doing, as it was supposed that every one knew just how to do this simple work; the question having been asked, leads me to think that an article on the subject might prove of some interest—to the novice if to no one else.

In the first place, it should be well understood that a colony of bees should not be examined or manipulated unless for a purpose. The promiscuous opening of hives, pulling out the combs and disturbing the cluster in the spring, or the busy worker in warm weather, has worked much harm, and the novice will do far better in his work when his apiary becomes so large that he cannot subject his colonies to a daily overhauling.

Again, colonies should not be examined at all save to perform some actually needed work, (such for instance as an introduction of a queen or something of the kind), except in pleasant weather, and when it is warm enough for the bees to fly safely. The beginner who has it all to learn in the way of practical work in the apiary may, however, take some particular colony and experiment with that alone, by opening and examining it until he gains that confidence and expertness which comes from practice alone; for this is a part of his apprenticeship, but it should be discontinued as soon as he is able to perform the work expertly.

To examine a colony, the first thing to be done is to blow a little smoke in at the entrance, and, by the way, at no other time save when using smoke should one stand in front of his hives—all operations should be performed from the rear. In using smoke there is no necessity of blowing in a large amount, the smallest

whiff is just as good as though the bees were suffocated with volumes of it.

After blowing in the smoke, the operator proceeds to the rear of the hive, and waits a moment till the bees are filled with honey, then he will proceed to take off the cover of the hive and lay it to one side; the next thing is to remove the covering mat from the frames; this, as well as all motions made around a bee-hive, should be done slowly and deliberately. Bees seem to detest any quick motions, and will resent them with a sting, when otherwise they would be as amiable as you please. After removing the mat, the center frames on one side or the other should be crowded together a little to give room to remove the outside frame. As soon as sufficient space is formed, the outside frame should be carefully taken out, examined for any desired purpose, and then carefully stood up beside the hive, or, what is better, carefully set into an empty hive or a light box made for that especial purpose.

After the first frame is removed, all subsequent manipulation comes easy enough, for all there is to be done is to take out the next frame, examine and replace it in the position occupied by the first one, and so on till all the frames are looked over, when the first frame can be set in the place of the last one taken out. In case, by reason of any inequalities or bulges in the face, it does not fit right, these inequalities may be shaved off with a sharp knife, or the frames may be set again in their original position. As the first method is much the easier, the apiarist should take care to see that each comb is interchangeable, not only with every other comb in the hive, but with every other comb in the whole apiary. This will be the means of simplifying his work, and making it easier to perform than it otherwise would be. Time is money, and every step taken to save time in an apiary is one in the right direction, and will be well appreciated on a day with the temperature at 100 F. or more, and fifty colonies to examine before night.

The manipulating of a colony is the simplest work of the apiary as it is purely mechanical and manual, and can be easily learned by practice. To know when and why to manipulate is a far more serious undertaking, and one that requires a vast amount of experience and study to fully learn, but when learned, it comprises the larger portion of what is required to make an expert apiarist.

Foxboro, Co. Mass.

For the American Bee Journal.

### To the Bee-Keepers of Indiana.

I want to talk with all the bee-keepers of Indiana. Bee-keepers, the time is set for our annual convention on Jan. 22, 1885. How many will be present? For almost one year the executive committee of the State Association have spent much time in the way of talk and correspondence in the

interest of our Society. At the State Fair we had a glimpse of our reward, a beginning of what we hope will be a grand success in the near future. All those who are sorely afflicted with remorse that they did not help us out at the Fair, can now have a chance to redeem themselves by coming and bringing as many as they can to the State meeting.

We hope that the week of heat and dust that we spent at the Fair in making the acquaintance of bee-keepers, and in making bee-keepers acquainted was not time spent fruitlessly. There is no reason why the Bee-Keepers' Society should not be, I will not say one of the largest, but the largest society which meets in the Agricultural rooms during this winter. We have the numbers and talent to make it the finest organization that will assemble in this city this winter.

I was surprised to meet so many women bee-keepers at the Fair—women who represent from 10 to 50 colonies; women who had the stamina to make a success of whatever they turned brain or hand to. Now, sister bee-keepers, assert your rights, overcome every difficulty and present yourselves at the State meeting. Let it be a meeting long to be remembered. If you have not learned all about bee-keeping, you can learn more in two days at a meeting of this kind than in a whole month of reading, for you will not only hear of the successes but of the failures of bee-keepers. On the other hand, if you think you have learned all, come and impart your knowledge to others. This meeting will be an important one. There will be many matters of interest brought before the Society in which we wish to have the voice of as many bee-keepers as possible.

MRS. C. ROBBINS, Pres.

For the American Bee Journal.

### International Bee-Keepers' Congress.

J. P. H. BROWN.

With this I send a call for an International Congress of Bee-Keepers to be held on the World's Exposition Grounds at New Orleans, La., on Feb. 24, 25 and 26, 1885. The time selected seems to suit the majority of bee-keepers the best. This has been ascertained by much correspondence. The Exposition offers a large hall and space for exhibits free of charge. Rates of board and quarters for bee-keepers attending the Congress will be made known through the BEE JOURNAL as soon as possible.

It is likely that the Exposition will withhold all apiarian exhibits until the week of the Congress. The prospects for a large attendance are very flattering. I hope that honey-producers will come well prepared to fully tackle the question of the disposal of the honey product. The question of honey-production, and all the methods and schemes for securing the greatest surplus have been most thoroughly ventilated by our bee-conventions, and now it is time to consider the subject of the disposition of the pro-

duct to the best advantage for the producer.

I appeal to the bee-keepers of America to send representatives to this Congress. In this matter no section or country should be known, but wherever intelligent apiculture is practiced, its interests should be represented.

Aside from the Congress, the sight of the foreign exhibits will alone be worth all the expense of the trip. So, fellow bee-keepers, lay aside your cares and labors for a week or two—strain a point—you have only got one life to live in this world—pack your valise and go.

Augusta, Co. Ga., Dec. 9, 1884.

For the American Bee Journal.

### The International Congress.

It is proposed to hold an International Bee-Keepers' Congress on the World's Exposition Grounds at New Orleans, La., Feb. 24, 25 and 26, 1885. An interesting programme of subjects of great importance to every bee-keeper in America will be presented and discussed. The disposition of our honey product, with a view to secure better prices will be fully considered. At the same time there will be an Exhibit of Bees and Apian Supplies. Fuller particulars will be given hereafter. At the time selected, the Exposition will be at its best, and excursion rates low. The bee-keepers of our country should lay aside business for a week or two, and make every exertion to attend this Convention. Come prepared with facts and statistics, and ideas arranged, to take part in its deliberations.

Dr. N. P. Allen, Smith's Grove, Ky.  
W. Williamson, Lexington, Ky.  
Dr. O. M. Blanton, Greenville, Miss.  
P. L. Viallon, Bayou Goula, La.  
Judge W. H. Andrews, McKinney, Tex.  
W. S. Hart, New Smyrna, Florida.  
S. C. Boylston, Charleston, S. C.  
Dr. J. P. H. Brown, Augusta, Ga.  
H. C. Austin, Austin's Springs, Tenn.  
R. C. Taylor, Wilmington, N. C.  
J. W. Porter, Charlottesville, Va.  
S. Valentine, Hagerstown, Md.

For the American Bee Journal.

### Bee-Hive Ventilation.

J. F. LATHAM.

On page 756, Mr. S. Corneil, in attempting a criticism of the ideas advanced by some of the correspondents of the BEE JOURNAL respecting the ventilation of bee-hives, including myself in the number, writes: "I notice that some of the contributors are in error in regard to the carbonic acid gas produced by the respiration of a cluster of bees." "These writers seem to think that because carbonic acid gas is more than half as heavy again as air, it falls to the bottom of the hive, and provisions should be made for getting rid of it at that point."

As only that portion of his comments which touches my statements, is subject to my notice, in answer I feel like saying that I think I am not



"in error" if the paragraph on page 342 embodying my ideas of bee-hive ventilation is called in question.

As a compound of liquids on being shaken up will re-arrange themselves in the order of their identity, so will an equilibrium be sought by air of different degrees of temperature. This operation of natural laws is most sublimely illustrated by the phenomena which culminate in our thunder-showers. The lower strata of the earth's atmosphere is rarefied by heat from the sun's rays, and ascends until an equilibrium is produced by its mingling with the upper, cold strata of the cloud regions; the colder air rushing in and supplying its place. The noxious gases from the earth's surface, diffused in those warm, humid accumulations, are re-arranged when the gases with which they are mingled assume their distinctive positions or characteristics, and the charm of nature is dissolved in the refreshing rainfall; while the noxious elements vent their "fiery spume" in the lightning's flash and the thunder's roll; "dissolving" to again unite with the surrounding elements, and again perform the eternal rounds of collection and diffusion as per the universal laboratory of the universe.

Aside from the electrical display wherein does not that grand exhibition of nature's process of purification faithfully illustrate the more humble process by which the domiciles of our generous workers of the apiary may be freed from the noxious gas incidental to the surroundings of all animate life in domesticity? especially such surroundings as the compulsory confinement which bees wintered in our Northern climate must necessarily be subjected to.

I do not claim that lower ventilation is the only outlet desirable or needed to free the bee-hive from the foul accumulations emanating from the exhalations of its inmates; whether respiratory or by transpiration, I would not have a reservoir of impure air in the lower portions of the brood-nest. Let us see: The paragraph alluded to in Mr. Cornell's critique, reads as follows: "When in a semi-dormant state the denizens of the hive require but little oxygen to support life or neutralize any harmful effects resulting from the accumulation of carbonic-acid gas in their surroundings." If there is anything in that sentence unrealistic or inapplicable to a cluster of bees in winter repose, I have been, as yet, unable to discover it. The next sentence reads: "As this gas, when occupying space in quantities detrimental to animal life, moves earthward, it is easy to comprehend how readily the inside of a bee-hive may be freed from its bad effects by proper downward ventilation, accompanied by an imperceptible upward ventilation, i. e., an upward ventilation not strong enough to produce a rapid current of cold air through or around the cluster."

I did not intend to advance the idea that the gaseous accumulations would sink to the bottom of the hive and roll out! But, by giving the proper ventilation at the entrance, and a

slight ventilation over the brood-nest, a gentle circulation of pure air inside of the hive would be continuous. Such an arrangement, if I am correct, would be consistent with natural laws governing the circulation of aerial fluids, i. e., as the air becomes warmed and vitiated by the bees, pure, cold air from the outside would pass in at the entrance, and a portion of the impure air in the lower portion of the brood-chamber would pass out at the same opening; thus forming a gentle flow of continuous supply and exhaust.

On opening the outside entrance to a lighted and heated room on a frosty winter evening, the process of aerial circulation may be readily observed by a person standing outside, as the heated, humid air rushes through the upper portion of the door-way, sparkling into the freezing atmosphere, and the cold air from without moves in to fill its place through the lower portion of the door-way. Right here is the germ contained in Mr. Clarke's "Ariadnean clew": the basis of hibernation, or hibernial requirements.

This, I think, sufficiently elucidates the import of the criticized paragraph; and if I construe the language of Mr. Cornell's critique correctly, his illustration as fully delineates its meaning as I have done. But enough. "Too much dispute puts truth to flight."

Cumberland, ? Maine, Dec. 8, 1884.

### Local Convention Directory.

#### Time and place of Meeting.

- Dec. 27.—Union, at Stuart, Iowa. M. E. Darby, Sec.  
1885.  
Jan. 6.—Southern Wisconsin, at Janesville, Wis. J. T. Pomeroy, Sec.  
Jan. 14.—Central Illinois, at Bloomington, Ill. W. B. Lawrence, Sec.  
Jan. 20, 21.—N. W. Illinois, at Freeport, Ill. Jonathan Stewart, Sec.  
Jan. 21—23.—Northeastern, at Syracuse, N. Y. Geo. W. House, Sec.  
Jan. 22, 23.—Indiana State, at Indianapolis, Ind. Frank L. Dougherty, Sec.  
Feb. 24, 26.—International, at New Orleans, La.  
May 28.—N. Mich. Picnic, near McBride, Mich. F. A. Palmer, Sec.  
June 19.—Willamette Valley, at La Fayette, Ore. E. J. Hadley, Sec.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

The eighth annual meeting of the Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association will be held in Temperance Hall, at Freeport, Ill., on Jan. 20 and 21, 1885.

JONATHAN STEWART, Sec.

**Preparation of Honey for the Market**, including the production and care of both comb and extracted honey, instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

**Ribbon Badges**, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

## What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

### Rules for this Department.

1. Give your name and post-office address.
2. Be brief, and to the point.
3. Send no simple questions, such as are answered in the bee-books.
4. Ask only such questions as are of general interest.
5. This department is not intended for advertising any one's wares—therefore questions concerning the manufacture of goods for sale are not appropriate.
6. Direct all questions to the editor—

THOS. G. NEWMAN,

925 West Madison St., CHICAGO, ILL.

### Sundry Queries.

If I scarify or uncap the honey over the brood, will the bees carry it into the section-boxes? and will the queen lay eggs in the cells from which the honey was taken?

O. P. CRITTENDEN.

Reading, ? Mich., Dec. 7, 1884.

**ANSWER.**—Yes if you do it at a time when the bees are crowding the brood department with brood; but if on the other hand it is during a time when the honey-flow is excessive, and the bees are inclined to load down the brood-combs with honey, they will recap the scarified cells. You will find the German bees more inclined to carry up the honey than Italians of any strain, I think.

### Bees Uneasy.

I have two colonies in the cellar under my kitchen; one is an Italian colony and the other is a colony of blacks. The former is very uneasy; the latter, very quiet. The temperature is about 40° above zero. Would the noise in the kitchen disturb them?

O. MCINNES.

London, Ont., Dec. 1, 1884.

**ANSWER.**—It has been demonstrated that bees will winter nicely with an anarchy of noise over their heads all winter. It is also quite probable that while such noise is not a cause of bee-diarrhoea, it often is an aggravation to the cause. It seems to me that such is true in your case, for while each colony is subjected alike to noise, temperature, ventilation and humidity, one is very quiet while the other is uneasy. Again we have proof that the wrong condition is within the hive.

### Honey-Boards, Section-Cases, etc.

1. Of what advantage is the slat or skeleton honey-board between the brood-frames and section cases? Would the bees not enter the sections more readily if the honey-board were dispensed with and the cases placed directly upon the body of the hive?

2. Where the cases set flat upon the hives, without beveled edges on either to keep them in place, is there not

danger of the cases blowing off? What objection is there to beveled edges or projections, or one or the other, to keep hives and cases together, and to prevent rain from driving in?

3. Will winter feeding disturb the bees so as to induce breeding or cause uneasiness or excitement resulting in bee-diarrhoea? J. W. GORDON.  
Brighton, Ont., Dec. 5, 1884.

ANSWERS.—1. When I devised that honey-board I knew that such a board between the brood-chamber and the surplus comb-honey department was a thing of great convenience, and that between the brood-chamber and surplus extracting frames, almost a necessity. I was not sure, however, that the board would not sometimes somewhat deter the bees from entering the sections, and this is one of the reasons why I constructed it so that the cases fit the hive as perfectly without the honey-board as with it. Years of experiment on a large scale have demonstrated to others and to myself that the board has not the least tendency to dissuade the bees from entering the surplus department as soon as the heat and nectar will admit of their entering such department with any other arrangement. The advantages of the slat, sink honey-board are these: 1. It keeps all the brace-combs below it and away from the sections, keeping them clear of these dripping bits of comb. 2. It thus greatly facilitates the easy and speedy removal or adjusting of the surplus arrangements. 3. When running for extracted honey no bits of comb ever rest the frames at their bottoms, thus destroying their rest at their tops, which makes a host of trouble. 4. It tends to keep the queen in the lower apartment. 5. If reversed in the fall, and covered with cloth, it gives a bee-passage over the combs, prevents the cloth from being gummed, and forms a bottom to the case or super holding the absorbing material, so the same may be put off or on without any danger of scattering the contents. 6. It is a protection against robber bees when removing surplus departments.

2. No, there is no danger whatever of the cases blowing off, nor of the rain beating in, where the hives and cases are properly managed (I never have any trouble from either); and if you allow of any such bevel or projections, it greatly increases the difficulty of quickly adjusting them, as it spoils a perfect "lateral movement"—the best of all movements with which to adjust one section or story of a hive to another. It is not only a damage but an extra expense, and entirely uncalled for.

3. Sometimes it will. If you are feeding bees with pure cane sugar syrup, which are occupying combs containing no bee-bread, I will warrant that no breeding nor bee-diarrhoea will result.

☞ The Monthly BEE JOURNAL for a year and the pamphlet "Bees and Honey," will both be sent for \$1.

## SELECTIONS FROM OUR LETTER BOX

### Boards in Front of Entrances.

In referring to my proposed plan of wintering, given on page 743, Mr. Chas. Mitchell says that I should "tack each board at the top edge against each hive, or the snow will freeze to them and keep melting on the ground so that in two or three days the boards will be leaning back and form a complete 'shoot' to catch fresh snow and fill the entrances." In reply I would say that these leaning boards used to keep the snow and wind from the entrances of the hives, rest on the bottom-board of the hive and not on the ground as he supposes; hence they are never drawn back as he speaks of; or at least, after using them for two years, I have never seen one do so. G. M. DOOLITTLE 40-80  
Borodino, © N. Y., Dec. 8, 1884.

### Is Honey-Dew Poisonous?

Will Dr. Tinker please say whether honey-dew is poisonous or not? Will it cause death or insanity? G.

[I have had no experience with the so-called honey-dew, and know little of it, except what has appeared in the bee-papers. If reference is had to any properties that the bees may convey to it, I should say that it would affect a person no different than other sweets usually stored by the bees.—DR. TINKER.]

### Hives Packed in Sawdust.

On May 1, 1884, I bought 7 colonies of bees in box-hives, transferred them to Quinby's improved hive, and increased them to 11 colonies. I have taken from the same 420 pounds of comb honey in one-pound sections, 264 pounds of it being white clover, and the balance gathered from goldenrod and buckwheat. My bees are on the summer stands packed in sawdust, with 6 inches of the same on top, with upper and lower ventilation, and with 40 pounds of honey and bees by weight of frames. I allowed 10 pounds for bees and frames.

C. R. HANCOCK.

Chatham, Ont., Dec. 4, 1884.

### Honey-Flora of Middle Tennessee.

The following is a list of the honey-producing plants, and the dates of their blooming in succession, in Middle Tennessee, 36° north latitude: During the latter part of February, white elm, alder and maple; March 1, box-elder; April 10, peach, pear and service; April 15, beech and sugar-tree; April 18, red-bud or Judas-tree; May 5, wild-cherry, raspberry and strawberry; May 10, poplar (the best of all); May 15, white clover and black locust; June 1, persimmon, black-gum and motherwort; June 5,

orchard-grass (for pollen); June 12, yellow or shittim wood; June 20, linden or basswood; June 25, chestnut and sour-wood; July 1, mellilot clover, catnip and motherwort; July 25, spider-plant; August 1, sumac and prickly-ash; August 10, heart's-ease; Sept. 1, goldenrod, flea-mint, ironweed, boneset and asters.

D. S. ENGLAND.

Sparta, © Tenn., Dec. 6, 1884.

### Report of the Buckhorn Apiary.

In the fall of 1883 I put 78 colonies into my bee-cellar, and all came out alive last spring. During the past season they have increased to 137 colonies by natural swarming, and I have them all in the cellar again in good condition. I have obtained 2,000 lbs. of comb honey and 2,000 lbs. of extracted honey, and I have about half of it left. F. A. GIBSON.

Racine, © Wis., Dec. 10, 1884.

### That Adulterated Honey.

Concerning the article of Mr. Hunt, on page 787 of last week's JOURNAL, we have the following from Mr. Von Dorn.

OMAHA, Neb., Dec. 6, 1884.—In reply to Mr. Hunt's article: 1. I know of no one who wishes him to go out of the bee-business. It is the adulteration business we are after, and we do not propose to let it up either.

2. He may have all the legal proof he needs as to the identity of the honey; I have it.

3. It is presumable that the Chicago Sugar Refining Company (one of the largest glucose works in the United States) knows what glucose is, and how to detect it. Prof. Nicholson, the chemist at the Nebraska State University, says: "I find neither starch nor paraffine, and believe (italics mine) the article to be pure strained honey." He believes; the Refining Company knows. Paraffine in honey is good; no wonder he believes. I proposed to have proof one way or the other before I told the public what it was.

4. I neither know nor care now who that queen-breeder was. It is of no importance to this case. If it was I who made any remarks, I presume I can furnish satisfactory proof in support of them.

5. I have no personal ill-will in the least, and if he can convince me that I am in the wrong, I will do more to right him than I have to hunt him down. T. L. VON DORN.

The readers of the BEE JOURNAL are not interested in a personal controversy, and with the exception of the result of the third analysis (if offered for publication) this article will close this subject in our columns. All we desire is to get at the facts of the case, and these, so far, are contradictory, and, therefore, unsatisfactory. What the next will be we do not know.



**The Bee Journal for 1885.****Premiums, \$25.00 in Cash.**

To increase the number of readers of the BEE JOURNAL, we believe, will aid progressive bee-culture and help to elevate the pursuit. We, therefore, offer the following

**CASH PREMIUMS FOR CLUBS.**

**\$10.00** for the largest club received at this office before Feb. 1, 1885 (either of the Weekly, Monthly, or both); one Weekly counts same as 4 Monthlies.

**\$5.00** for the second largest; **\$4.00** for the third; **\$3.00** for the fourth; **\$2.00** for the fifth; and **\$1.00** for the sixth largest club.

All former offers of Premiums are now withdrawn.

The price of the Weekly BEE JOURNAL for 1885 is \$2.00 for one copy; \$3.80 for two copies (to the same or different post-offices); \$5.50 for three copies; \$7.20 for four copies; and for five or more copies, \$1.75 each.

We have decided to publish the Monthly BEE JOURNAL for next year of the same size and shape as the Weekly, (which contains about the same amount of reading matter as the present Monthly,) at 50 cents a year; two copies (to the same or different post-offices) for 90 cents; three copies for \$1.30; four copies for \$1.70; five copies for \$2.00; more than five copies for 40 cents each. The time has been extended on all portions of next year, which have been paid for at the rate of \$1.00.

Subscriptions for two or more years for one person, will count the same as each year for a different person.

**Apiary Register—New Edition.**

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it. The prices will hereafter be as follows:

For 50 colonies (120 pages).....\$1 00  
" 100 colonies (220 pages)..... 1 25  
" 200 colonies (420 pages)..... 1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

The new Monthly for January will be issued this week, and the many sample copies already ordered will then be sent. We send samples free to all who wish them, or desire to get up Clubs. Now is the time to work for the Cash premiums we offer. A large club for the Monthly can be gotten up in almost every locality.

**Create a Local Honey Market.**

Now is the time to create Honey Markets in every village, town and city. Wide-awake honey producers should get the Leaflets "Why eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully all over the territory they can supply with honey, and the result will be a demand that will readily take all of their crops at remunerative prices. The prices for "Honey as Food and Medicine" are as follows:

Single copy 5 cts.; per doz., 40 cts.; per hundred, \$2.50. 500 will be sent postpaid for \$10.00; or 1000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

**Premium for Club of 10 Subscribers.**

The book for every farmer is the one entitled "Affleck's Farmer's and Planter's Record and Account Book," in which there is the most systematic, complete and convenient arrangement of headings for every Farm Account and memoranda of all important events which may occur in connection with his business. Every progressive farmer certainly desires to make a success of his occupation, and should adopt every possible means of bringing about that result. He, then, should have a correct knowledge of his entire business, which he can have only by keeping a correct account of every crop produced on his farm, the cost of production of all his live stock and an itemized account of all his expenses. Then at the close of the year, when he takes off his balance sheet, which is admirably arranged in the book above referred to, he will be able to see at a glance whether his farm does or does not pay.

This valuable book contains 166 pages, is nicely printed on writing paper, ruled and bound, and the price is \$3.00. It can be sent by mail for 24 cents extra.

We can supply these books at the publisher's price, or will make a present of one copy for every club of TEN subscribers to the Weekly BEE JOURNAL for one year, with \$20. Four subscribers to the Monthly will count the same as one for the Weekly.

Now is the time to get up Clubs. Who will work for a copy of this valuable book?

For two subscribers for the Weekly BEE JOURNAL (or 8 for the Monthly) for one year, we will present a Pocket Dictionary, and send it by mail postpaid.

**Honey and Beeswax Market.**

OFFICE OF THE AMERICAN BEE JOURNAL,  
Monday, 10 a. m., Dec. 15, 1884.

The following are the latest quotations for honey and beeswax received up to this hour:

**CHICAGO.**

HONEY.—Comb honey has been taken with freedom by the trade this week, but 15¢ is the best price obtainable for a fancy article of comb honey in frames. Some lots bring from 14 to 15¢ when in good order. Stock of comb honey is not large at present. Extracted, 7¢, for new.  
BEESWAX.—For fair to yellow, 28¢ to 30¢.  
R. A. BURNETT, 161 South Water St.

**NEW YORK.**

HONEY.—The market is well stocked with honey which is in good demand at the following prices: Fancy white comb in 1-lb. sections, 18¢ to 20¢; the same in 2-lb. sections, 16¢ to 18¢; fair to good white comb in 1 and 2-lb. sections, 14¢ to 16¢; fancy buckwheat comb in 1-lb. sections, 12¢ to 13¢; same in 2-lb. sections, 11¢ to 11½¢; ordinary buckwheat comb in 2-lb. sections, 9¢ to 10¢. Extracted, white clover in kegs or small barrels, 6¢ to 8¢.  
BEESWAX.—Prime yellow, 30¢ to 31¢.  
MCCAUL & HILDRETH, 34 Hudson St.

**CINCINNATI.**

HONEY.—There is an unsatisfactory demand for extracted honey from manufacturers, while there is a fair inquiry for small packages of clover honey such as dime, ¼-lb., 1-lb., and 2-lb. jars, from the retail trade. Prices are low as arrivals exceed the demand. Extracted honey brings 5¢ to 6¢ on arrival; choice white comb honey is in fair demand and sells best in 1-lb. sections. It brings 15¢ to 16¢ in the jobbing way. We have several small lots of dark comb honey from parties in Illinois, and offered it as low as 10 and 11 cents per lb., without finding a buyer. Dealers most certainly mislead producers by quoting buckwheat and popular comb honey, if they are not more successful than we are in disposing of the same.

BEESWAX.—The demand is slow and arrivals are few. Good yellow brings 26¢ to 27¢ on arrival.  
C. F. MUTH, Freeman & Central Ave.

**SAN FRANCISCO.**

HONEY.—Stocks of combs are larger and include some of choice quality. Supplies of extracted are liberal, and prices are fully as much in buyers' favor, as at any time during the season.  
White to extra white comb, 9¢ to 10¢; dark to good, 4¢ to 5¢. Extracted, choice to extra white, 3¢ to 4¢; dark and candied, 3¢ to 3½¢.  
BEESWAX.—Wholesale, 24¢ to 27¢.  
STEARNS & SMITH, 425 Front Street.

**ST. LOUIS.**

HONEY.—Steady; demand and supply both small. Comb, 12¢ to 14¢ per lb., and strained and extracted 6¢ to 6½¢.  
BEESWAX.—Firm at 32¢ to 32½¢ for choice.  
W. T. ANDERSON & CO., 104 N. 3d Street.

**CLEVELAND.**

HONEY.—Honey is in a little better demand at a little lower price than our former quotations. Whilst the market is still full, we are enabled to place extra lots of strictly white one-lb. sections at about 15¢, with an occasional sale at 16¢; 1½ and 2-lb. sections, best white, 14¢; dark and second quality, rather slow at 12 to 14¢. For extracted there is no demand.  
BEESWAX.—28¢.  
A. C. KENDEL, 115 Ontario Street.

**SAN FRANCISCO.**

HONEY.—We quote comb honey in 2-lb. sections, 13¢ to 14¢; extracted, 6¢ to 6½¢.  
GEO. W. MEADE & CO., 213 Market.

**KANSAS CITY.**

HONEY.—The market is quiet and unchanged, with good demand and liberal receipts. Comb, ¼-lb. sections, none in the market. They would bring 18¢; 1-lb., 14¢ to 16¢; 2-lb., 13¢ to 14¢. The above figures are for choice stock in regular shipping crates. Dark or large combs in rough crates sell slowly at 9 to 10¢. Extracted, California, 6¢ to 7¢; white clover, 7¢ to 8¢; Southern, 5¢ to 6¢.  
BEESWAX.—None in the market.  
CLEMONS, CLOON & CO.  
Successors to Jerome Twichell.

**BOSTON.**

HONEY.—We quote best white in 1-lb. sections, 18¢ to 20¢; 2-lb., 16¢ to 18¢. Extracted, 8¢ to 9¢. Un-glazed sections sell best.  
BEESWAX.—35¢.  
BLAKE & RIPLEY, 57 Chatham Street.

**Convention Hand-Book.**

It is a nice Pocket Companion for bee-keepers. It is beautifully printed on toned paper, and bound in cloth—price 50 cents.

We have had some bound in Russia leather, with colored edges—price 60 cents.

☞ We can supply photographs of Rev. L. L. Langstroth, the Baron of Berlepsch, or Dzierzon, at 25 cts. each.

**Young Men!—Read This.**

THE VOLTAIC BELT CO., of Marshall, Mich., offer to send their celebrated ELECTRO-VOLTAIC BELT and other ELECTRIC APPLIANCES on trial for thirty days, to men (young or old) afflicted with nervous debility, loss of vitality and manhood, and all kindred troubles. Also for rheumatism, neuralgia, paralysis, and many other diseases. Complete restoration to health, vigor and manhood guaranteed. No risk is incurred, as thirty days trial is allowed. Write them at once for illustrated pamphlet free. 6D1y

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And a general assortment of Bee-Keepers' Supplies send for circular to  
51D1y J. E. PRYOR, Dexter, Iowa.

**DRAKE & SMITH,**

Successors to A. E. Manum, Bristol, Vermont,  
MANUFACTURERS OF

**BEE-KEEPERS' SUPPLIES.**

Hives, Sections, Shipping Crates, &c.

White Poplar Sections a specialty in quality and accuracy. Send for Illustrated Catalogue and Price List. 50A12t

**SEND FOR IT.**

We have just issued a new four-page circular that will interest any bee-keeper. Send your name on a postal card for it.  
44Atf HENRY ALLEY, Wenham, Mass.

**WIN** more money than at anything else by taking an agency for the best selling book out. Beginners succeed grandly. None fail. Terms free. HALLETT BOOK CO.  
51A1y Portland, Maine.

**A PRIZE.** Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All, of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address  
51A1y TRUE & Co., Augusta, Maine.

**HELP** for working people. Send 10 cents postage, and we will mail you free, a royal, valuable sample box of goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. You can live at home and work in spare time only, or all the time. All of both sexes, of all ages, grandly successful. 50 cents to \$5 easily earned every evening. That all who want work may test the business, we make this unparalleled offer: To all who are not well satisfied we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Immense pay absolutely sure for all who start at once. Don't delay. Address STINSON & Co.  
51A1y Portland, Maine.

**\$200,000** in presents given away. Send us 5 cents postage, and by mail you will get free a package of goods of large value, that will start you in work that will put you in the way of making more money in a few days than you ever thought possible at any business. Agents wanted everywhere, of either sex, of all ages, for all the time, or spare time only, to work for us at their own homes. Fortunes for all workers absolutely assured. Don't delay. H. HALLETT & Co.  
51A1y Portland, Maine.

**A Christmas Present.**

To every person who sends us one NEW subscription, (besides his own renewal), for one year, for the Weekly BEE JOURNAL, or 4 NEW Monthly subscribers, for a year, we will send as a present, by mail, postpaid, a copy of "Mistletoe Memories, or What the Poets say about Christmas."



It comprises a collection of poems selected from the writings of H. W. Longfellow, J. G. Whittier, Thomas Hood, Alfred Domett, Chas. Mackay, Sir Walter Scott, Jennie Joy, and others. The whole bound in Banner shape, with rich silk fringe and tassels. For presentation, this art souvenir is vastly superior to a mere Christmas card, as it combines the advantages of both art and literature. Size, 4 by 6 1/2 inches.

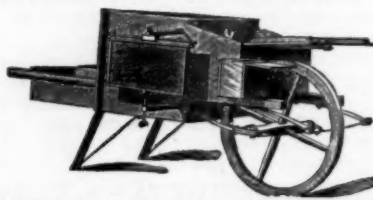
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We have some ELEGANT RIBBON BADGES, having a rosette and gold Bee, for bee-keepers' use at Fairs, Conventions, etc. Price 50 cents each, by mail, postpaid.

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More than 50 pages, and more than 50 fine illustrations were added in the 5th edition. The whole work has been thoroughly revised, and contains the very latest in respect to bee-keeping. It is certainly the fullest and most scientific work treating of bees in the World. Price, by mail, \$1.25. Liberal discount to dealers and to clubs.

A. J. COOK, Author and Publisher,

State Agricultural College, LANSING, MICH.  
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**\$66** a week at home. \$5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLETT & Co., Portland, Maine.  
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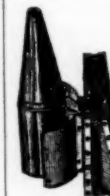
**For Bees, Queens.**

Honey, Foundation, Hives, Sections, and all Apian Implements, send for Circular to

FLANAGAN & ILLINSKI,

1AB1y Lock box 995, Belleville, St. Clair Co., Ills.

**GOLD** for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money in a few days, than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer: to all who are not well satisfied, we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address STINSON & Co., Portland, Maine. 4A1y

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Send for my 32-page Illustrated Catalogue of Bee-Keepers' Supplies of every description.

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A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

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New and Enlarged Edition  
OF  
**BEES and HONEY,**

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Management of an Apiary for Pleasure  
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Editor of the Weekly Bee Journal.

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It contains 220 profusely illustrated pages, is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the Honey-Bee, and at the same time produce the most honey in its best and most attractive condition.

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**A Liberal Discount to Dealers, by the Dozen or Hundred.**



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It makes the finest extra thin Foundation for comb honey. For Sale by

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State, County and Township Rights for Sale.

We sold thousands of the Traps last season. Enterprising supply dealers will find the Traps the best paying article they can deal in. Circulars ready. **HENRY ALLEY,** 49Atf  
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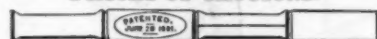
READ THIS.

A word of explanation in regard to the infringement suit on the One-Piece Section, we deem necessary at this time.

I commenced suit against A. I. Root, in the United States Circuit Court, for the Northern district of Ohio; Stanley Matthews presiding. He decided that the patent was void for want of novelty. I have taken an appeal to the United States Supreme Court at Washington, which will decide the case, and its decision will be final. If it goes against me I will submit, but if decided in my favor, I shall expect all who have infringed will pay me damages from date of the patent.

Some unprincipled parties are advertising that the Courts have decided that the patent is void. This is not the case, as it is before the United States Supreme Court at Washington, at the present time. When that Court gives its opinion it will be final, and until it does, any one infringing will be liable for damages, if the United States Supreme Court sustains the patent.

**PRICES OF SECTIONS.**



One-lb. Sections in lots of 500 to 4,000	\$5.00
Ditto Ditto 5,000 to 10,000	4.75
Ditto Ditto 10,000 to 25,000	4.50
Ditto Ditto 25,000 to 50,000	4.25
Ditto Ditto 100,000 or more	4.00

The one-lb. Section is 17 inches long. For any sizes between 17 and 20 inches in length, add 5 per cent. For any sizes between 20 and 24 inches, add 10 per cent. Add the above per centage to the price of one-lb. Sections in the same quantity.

**J. FORNCROOK & CO.,**

50ASLBClf Watertown, Wis., Dec. 1, 1884.

**A NEW BEE-VEIL.**

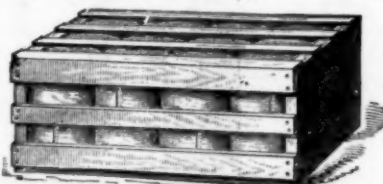
There are five cross bars united by a rivet through their center at the top. These bars are buttoned on to studs on the neck-band. The bars are of best light spring steel; the neck-band of best hard spring brass; the cover is of handsome light material. It is very easily put together, no trouble to put on or take off, and folds compactly in a paper box 6x7 inches by one inch deep. There would be no discomfort in wearing it either day or night, and the protection against Mosquitoes, Flies, Bees, Gnats, etc., is perfect. The weight of the entire Veil being only five ounces. Price, by Mail or Express, \$1.00.



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The sweetest, cheapest and most attractive small butter package ever offered. Butter sells quicker and brings better prices for family trade than in any other package. Send for descriptive price list. **CHAS. P. WILLARD & CO.,** 280 Michigan St., CHICAGO.

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All persons who have lost Real Estate in Iowa, by reason of TAX OR JUDICIAL SALES, are invited to correspond with **RICKEL & BULL,** Attorneys at Law, 41 First Ave., Cedar Rapids, Iowa, and they will learn something to their advantage.

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Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address, **TRUE & CO.,** Augusta, Maine. 4A1y

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For further information, send for Circular. 7A1y RICHMOND, Fort Bend Co. TEXAS.

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HINTS AND READY RECIPES,

is the title of a very valuable book that gives a great amount of information, of the utmost importance to Everybody, concerning their daily habits of Eating, Drinking, Dressing, Sleeping, Bathing, Working, etc.

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What to Eat, How to Eat it, Things to Do, Things to Avoid, Perils of Summer, How to Breathe, Overheating Houses, Ventilation, Influence of Plants, Occupation for Invalids, Superfluous Hair, Restoring the Drowned, Preventing Near-Sightedness, Parasites of the Skin, Bathing—Best way, Lung and Lung Diseases, How to Avoid them, Clothing—what to Wear, How much to Wear, Contagious Diseases, How to Avoid them, Exercise, Care of Teeth, After-Dinner Naps, Headache, cause & Malarial Affections, Group—to Prevent.

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